

Nutrition for Expectant Mothers

by Dr. (Mrs.) M. B. Kagal, M.B.B.S. ; I.M. ; M.P.H.

THE belief that a pregnant woman must eat for two is a half truth and if not understood correctly can do more harm than good. An article on this subject it is hoped, will be useful to mothers, field workers and teachers.

The belief refers more to the quality of the food eaten than the quantity as, if the quantity is increased greatly, it may even adversely affect the mother's health. Viewed from the point of view of quality there is a lot in this belief. A pregnant mother's requirements are not increased so far as the foods for fuel and reserve or what are termed as carbohydrates and fats or high calorie givers, but are considerably increased in the essential proteins, vitamins and minerals. These are necessary for the building of the baby's body.

PROTEINS—The body builders

Every moment of our life the body mechanism is breaking down tissue cells and in doing so uses up energy. Of the food eaten the body mechanism picks out necessary building material and is continuously engaged in building up the growing tissues or those broken down by wear and tear without our being conscious of it. If necessary building material is not available, there is inefficiency in functioning, if not actual disease and break down.

Food substances engaged in body growth and repair are the proteins and are made up of carbon, hydrogen, nitrogen and oxygen. The presence of the element nitrogen in foodstuffs distinguishes it from carbohydrates and fats, the fuel givers. Proteins are present in both animal and vegetable foods and vary in quality. Every living cell, vegetable or animal, must have proteins for growth and repair. Plants can manufacture the proteins needed for their growth, from the soil and the air, while animals and man gets these from plants

and animals. Proteins are made up of substances called amino-acids. About a couple of dozen of these amino-acids are necessary for life. Some of these are simple ones while others are complicated. About eight or ten of these complex amino-acids have to be supplied to the body and are termed the essential proteins. The others being of simpler nature, the body can manufacture itself. These essential proteins which are also termed "complete", proteins are found in milk, eggs and nuts. The proteins contained in cereals, legumes, vegetables and fruits in general, contain proteins of poor quality. However the importance of these proteins of lesser value is not inconsiderable as supplemented by milk they serve to form a properly balanced diet.

The protein requirement of the body is based on the normal weight of an individual and is not dependent on the actual weight or the activity. Pregnant women, nursing mothers and growing children need a larger proportion of the foods containing essential proteins. Experiments point out that milk protein is the most easily digested and readily absorbed. This is not difficult to believe or understand as the first diet of the offspring of all mammals, is mother's milk.

Milk

Milk is nature's most perfect food. It contains all mineral elements needed by the foetal skeleton. Its high content of calcium and phosphorus makes it ideally suited for the growth of the bones and teeth. Its tissue building proteins are readily digested and absorbed. About a seer of milk provides nearly 1/4 of the total energy requirements. Last, but

not the least, milk contains the important infection-resisting vitamin 'A'.

Minerals

The approximate amount of mineral elements found in the body are :—

	% in the body
Calcium	2
Phosphorus	1.1
Potassium	0.35
Sulphur	0.25
Chlorine	0.15
Sodium	0.15
Magnesium	0.05
Iron	0.004
Manganese	0.0003
Copper	0.00015
Iodine	0.0004

and traces of cobalt, zinc and flourine.

An ordinary well balanced diet provides energy, helps in building the body tissues, and maintains resistance to fight against infections.

The element iron requires special mention. It helps in the formation of the blood, which is constantly circulating in the body carrying nutrient substances and oxygen to every part, from where it also removes all the waste matter. Lack of iron in the food results in anaemia and leads to a feeling of tiredness, lassitude and forgetfulness.

Anaemia is a very common ailment found amongst pregnant women in this country. This fact needs to be constantly borne in mind.

About 15 mgs. of iron per day are needed by an adult. Women should have at least 2 mgs. extra, and an expectant mother needs 20 mgs. So it will be noted that a pregnant woman needs 25% to

(Continued on page 79)

"On a foundation of good food we can build almost anything ;
without it we can build nothing."

—Henry Wallace.